Table III.

Remedial Action Alternatives Identified for Evaluation for the Cleanup Action Plan

Remedial alternatives evaluated for soil are as follows:

1	Intrinsic bioremediation (monitored natural attenuation)
2	Low-permeability cap
3	Excavation and landfill disposal
4	Excavation and volatilization treatment
5	Excavation and enhanced bioremediation
6	Excavation and thermal treatment
7	Excavation and soil washing
8	Excavation and chemical treatment
9	*In-situ* soil vapor extraction
10	*In-situ* enhanced bioremediation
11	*In-situ* re-circulating enhanced bioremediation wells
12	*In-situ* soil flushing
13	*In-situ* thermally enhanced sparging
14	*In-situ* chemical treatment

Remedial action alternative evaluated for saturated soil, groundwater and surface water are as follows:

1	Intrinsic bioremediation (monitored natural attenuation)
2	Institutional controls and groundwater monitoring
3	Containment – vertical barriers
4	Groundwater recovery and treatment using vertical wells
5	Groundwater recovery and treatment using horizontal well(s)
6	Groundwater recovery and treatment using trench(es)
7	Dual phase extraction
8	Biological treatment using an oxygen releasing compound
9	*In-situ* air sparging – vertical wells
10	*In-situ* air sparging – horizontal wells
11	*In-situ* hot water flushing
12	*In-situ* steam flushing
13	*In-situ* passive treatment – reactive walls
14	*In-situ* chemical treatment

Table IV

Comparison of Station Area Alternatives in Meeting MTCA Requirements

Comparative Criteria	Soil Vapor Extraction	Air Sparging with SVE
A. Protection of Human Health & the Environment	O[1]	X[2]
B. Compliance of ARARs	O	X
C. Compliance Monitoring	X	X
D. Permanence		
1. Overall	X	X
2. Short-term	X	X
3. Long-term	X	X
4. Treatment Preference	X	X
5. Cost	X	X
6. Community Concern	O	X
E. Restoration Time Frame	O	X
F. Public Concern[3]	X	X

[1]O = Does not meet MTCA requirements

[2]X = Meets MTCA Requirements

[3]Ecology will provide public notice and opportunity for comment on the draft CAP as described in WAC 173-340-600.

Table V

Comparison of Plume Alternatives in Meeting MTCA Requirements

Comparative Criteria	Intrinic Bioremediation	Enhanced Bioremediaiton Sparging	*In-situ* Air
A. Protection of Human Health & the Environment	O[1]	O	X[2]
B. Compliance of ARARs	O	X	X
C. Compliance Monitoring	X	X	X
D. Permanence			
1. Overall	X	X	X
2. Short-term	X	X	X
3. Long-term	X	X	X
4. Treatment Preference	X	O	O
5. Cost	X	X	O
6. Community Concern	O	X	X
E. Restoration Time Frame	O	O	X
F. Public Concern[3]	X	X	X

[1]O = Does not meet MTCA requirements

[2]X = Meets MTCA Requirements

[3]Ecology will provide public notice and opportunity for comment on the draft CAP as described in WAC 173-340-600.

Table VI

Comparison of Distal End of Plume Alternatives in Meeting MTCA Requirements

Comparative Criteria	GW[1] Recovery & Treatment w/ Vertical Wells	GW Recovery & Treatment w/ Horizontal Well	GW Recovery & Treatment w/ Trench
A. Protection of Human Health & the Environment	X[2]	X	X
B Compliance of ARARs	X	X	X
C. Compliance Monitoring	X	X	X
D. Permanence			
1. Overall	X	X	X
2. Short-term	X	X	X
3. Long-term	X	X	X
4. Treatment Preference	X	X	X
5. Cost	X	X	X
6. Community Concern	X	X	X
E. Restoration Time Frame	X	X	X
F. Public Concern[3]	X	X	X

[1]GW = groundwater

[2]X = Does comply with MTCA requirements.

[3]Ecology will provide public notice and opportunity for comment on the draft CAP as described in WAC 173-340-600.

Table VII.

Cost Summary by Remedial Alternative

Station Area	**Capital**	*O&M*	*Cost of Alternative*
Soil Vapor Extraction	$76,700	$95,700	$172,400.00
Air Sparging with SVE	$97,500	$113,300	$210,800.00
Plume			
Monitored Intrinsic Bioremediation	$3,200	$4,000 (1)	$7,200.00
Oxygen Releasing Compound	$502,590	$1,000 (2)	$503,590.00
In-situ Air Sparging using Vertical Wells	$102,700	$129,300 (3)	$232,000.00
Distal End of Plume			
Groundwater Recovery and Treatment-Vertical Wells	$96,500	$332,000	$428,500.00
Groundwater Recovery and Treatment – Horizontal Wells	$123,800	$282,000	$405,800.00
Groundwater Recovery and Treatment – Recovery Trench	$73,300	$282,000	$355,300.00

Table VIII.

Proposed Project Cost

	Capital	**O&M**	**Total Cost**
Monitored Intrinsic Bioremediation	$3,200	$4,000	$7,200
Groundwater Recovery and Treatment – Vertical Wells	$96,500	$332,000	$428,500.00
Air Sparging with SVE	$97,500	$113,300	$210,800.00
Sum of Costs	**$197,200.00**	**$449,300.00**	**$646,500.00**